MITSUBISHI ELECTRIC

PRESENTATION PRODUCTS

HMP-500S/505S Media Player
User's Manual

About the HMP-500S/505S Models

This user's manual applies to both model variants each with different local storage technologies:

HMP-500S

HD network media player

Hard disk local storage

For general installations

80GB capacity for up to 30 hours of HD video@8Mbps

HMP-505S

Solid-state HD network media player

Internal CF card local storage

Certified for shock and vibration- tolerant installations

4GB capacity for up to 105 minutes of HD video@8Mbps

All aspects of operation for the HMP-505S are identical to the HMP-500S model as depicted in the illustrations.

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1. Introduction to the HMP-500S/505S Media Player

The HMP-500S/505S Media Player is an industrial-grade, network managed, high-definition media player suitable for large format digital signage displays such as LCDs and projectors.

- Feature-rich high-definition
- Managed through internet
- Includes turn-key Microsoft Windows-based Adfotain Manager tool for simplified scheduling and screen layout management
- Support multiple screen partitions
- Uninterrupted playback during file update
- Low power consumption fanless design
- 4GB Internal SLC high-performance solid-state storage (HMP-505S only)

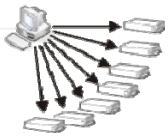
1.1. Software Management Features

Adfotain Manager Express digital signage software included

Adfotain Manager Express lets you quickly schedule and playback program on your digital signage player. Featuring an intuitive visual calendar layout, this bundled PC application makes it easy to deliver dynamic HD-quality videos, photos, and PowerPoint slides (stills) to your intended audience. For details on management features such as day-parting and content distribution, please see the Adfotain Manager Express Software User's Manual.

Automatic network detection and one-to-many network transfer

Once you have scheduled your contents, you can quickly send it out to your players across the network with a few clicks of the mouse. All players on the same network are automatically located and simultaneously updated within Adfotain Manager Express, saving precious time.



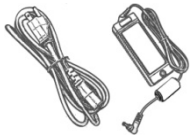
Disruption–free content update via USB

To manage the HMP-500S/505S Media Player over a network, you can use a USB mass-storage device to sync your contents. Simply export the new playlist and media files to a removable storage device and connect the device to the player to initiate automatic update. The player can update contents without any disruption to your current playback.

USB
UPDATE

1.2. Package Contents

Media Player Unit

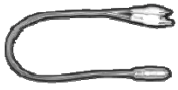


AC Adapter and Cord

Mounting Plate (x2)
Screw (x4, not shown)

Software CD

Ethernet cable



RCA to 1/8” mini-jack audio adapter

1/8” to 1/8” mini-jack audio cable

Quick Start Guide

1.3. Physical views

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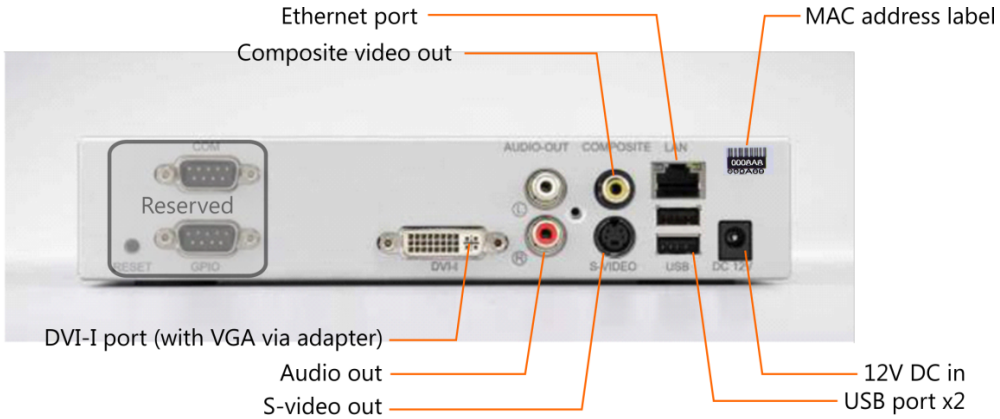
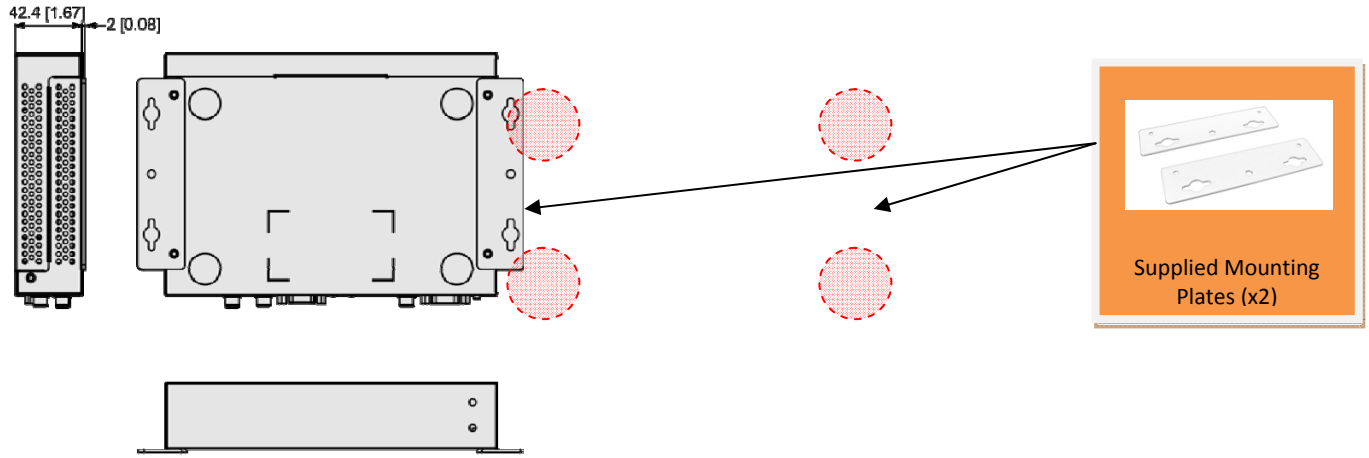


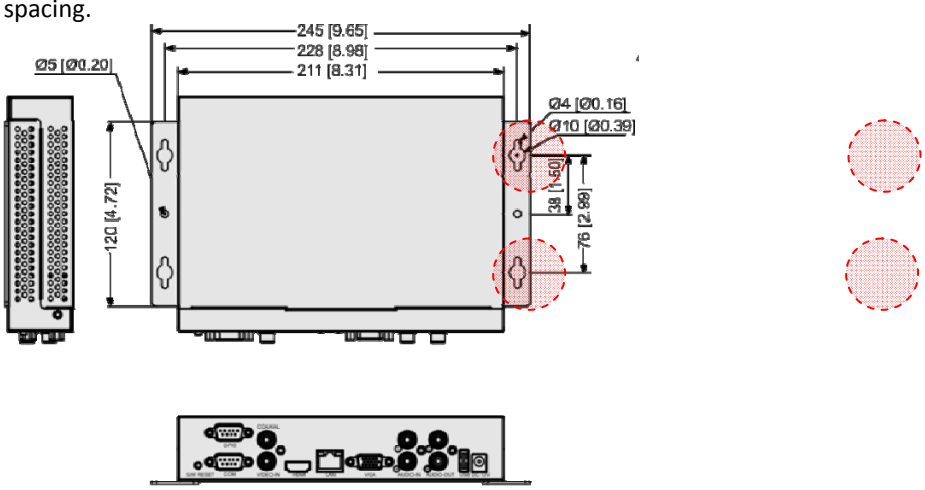
1.4. Unit Installation

The HMP-500S/505S is supplied with a pair of mounting plates for unit installation.

1. Attach the mounting plates to the bottom side of the player with 2 screws (supplied) on each side.



2. The player with the mounting plates attached can be mounted using 4 screws (not supplied) at 76mm X 228mm (2.99” X 8.98”) spacing.



2. Player System Setup

2.1. Setting up the Player

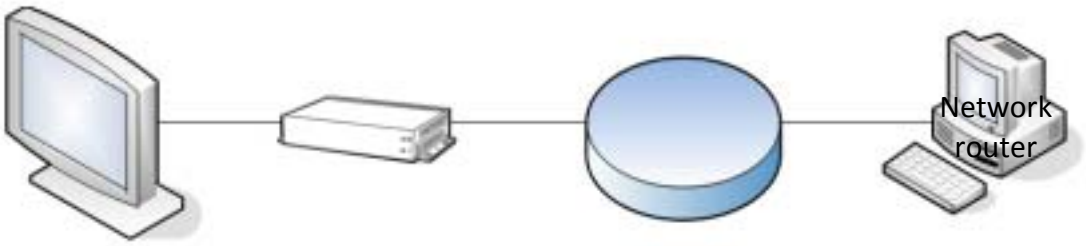
Attach a video cable (DVI, video, S-video, or VGA) to your display

Connect and power on your display. Switch your display to the corresponding video input mode (VGA /Video/S-video/DVI/HDMI)

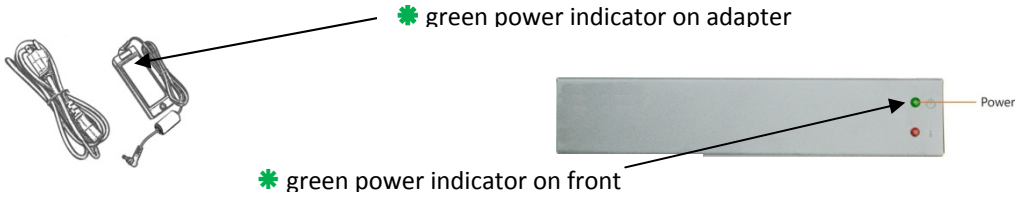
- If your display lacks DVI or HDMI and requires a VGA connection, a DVI to VGA is required.
- If your display has HDMI but not DVI, you can purchase an HDMI-DVI adapter or cable.
- For audio output, connect the supplied stereo RCA cable from the player to your monitor.

Connect player to your network

Connect player to your network router. Adfotain Manager Express can detect the IP location of your player automatically on a DHCP network. See setting up Adfotain Manager Express in this section to set up the program on your PC.
*If your network requires a static IP, you can also use Adfotain Manager Express to set up the static IP. Please contact your network administrator if you are unsure which IP addresses are available on your network.



Attach the AC power adapter to power on the unit



Connect the Power Adapter to a wall outlet and player.

The ❋ green power indicator on the player unit will immediately light up.

The player should display on screen information on your screen corners during boot up. Wait a few moments to let the process complete.

2.2. Setting up Adfotain Manager Express

Adfotain Manager Express lets you perform player configuration, maintenance, and scheduling operations from your PC.

Installation

Minimum system requirements

Windows Vista or Windows XP operating systems	1 GHz AMD or Intel CPU
.DirectX 9	512 MB of system memory
.NET Framework 3.0	20 GB hard drive

(higher versions and numbers also compatible)

PowerPoint 2003 or 2007 required for PowerPoint slideshow feature.

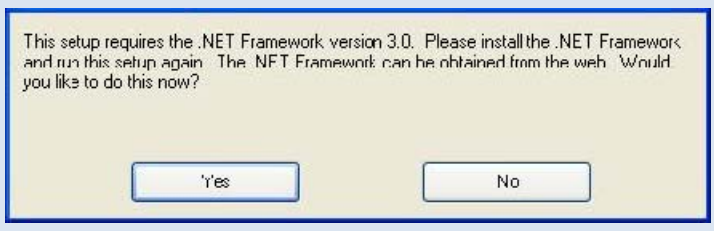
Windows Media Player 10 or 11 required for video previews.

Setup process

Insert the Adfotain Manager Express CD and the installer should pop up automatically. If it does not start, click on "setup.exe" located on your CD using Windows Explorer. If you haven't installed .NET Framework, you will be prompted to do so. If it is already installed, please

For Windows XP only: .Net Installation

The Windows .NET Framework is included on the CD and will be installed if absent from your system. Click Yes and follow the prompts to install it


This setup requires the .NET Framework version 3.0. Please install the .NET Framework and run this setup again. The .NET Framework can be obtained from the web. Would you like to do this now?
Yes
No

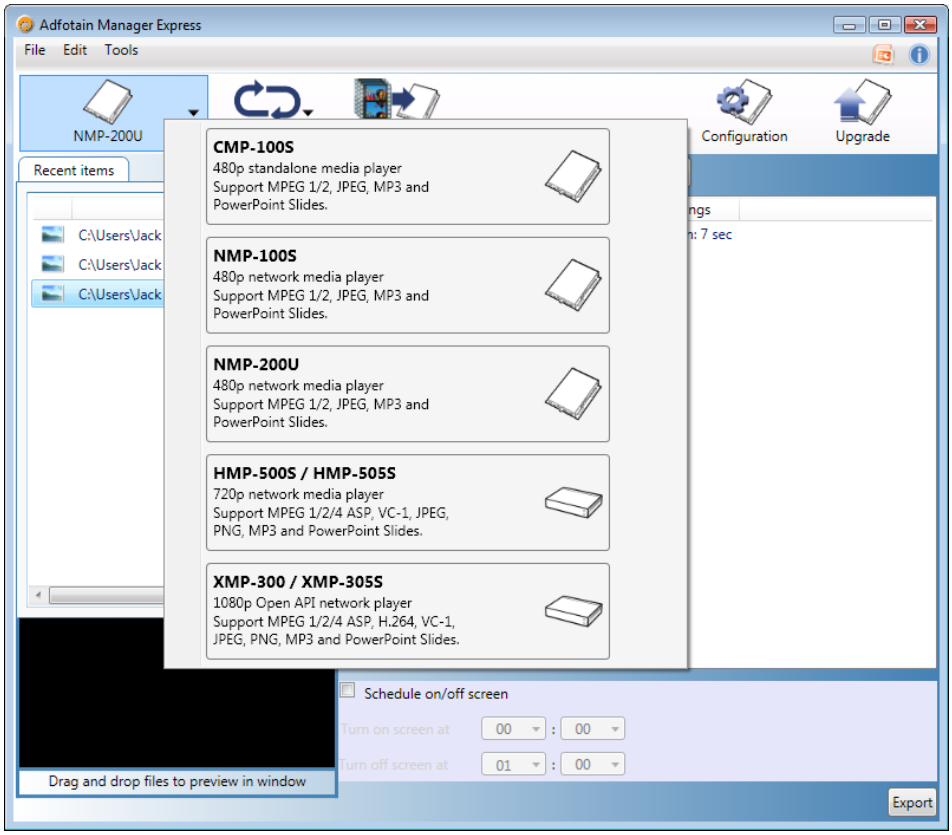
proceed to the next section.

1. Run the installer and follow the step by step instructions.
2. Close the installer to finish installation.

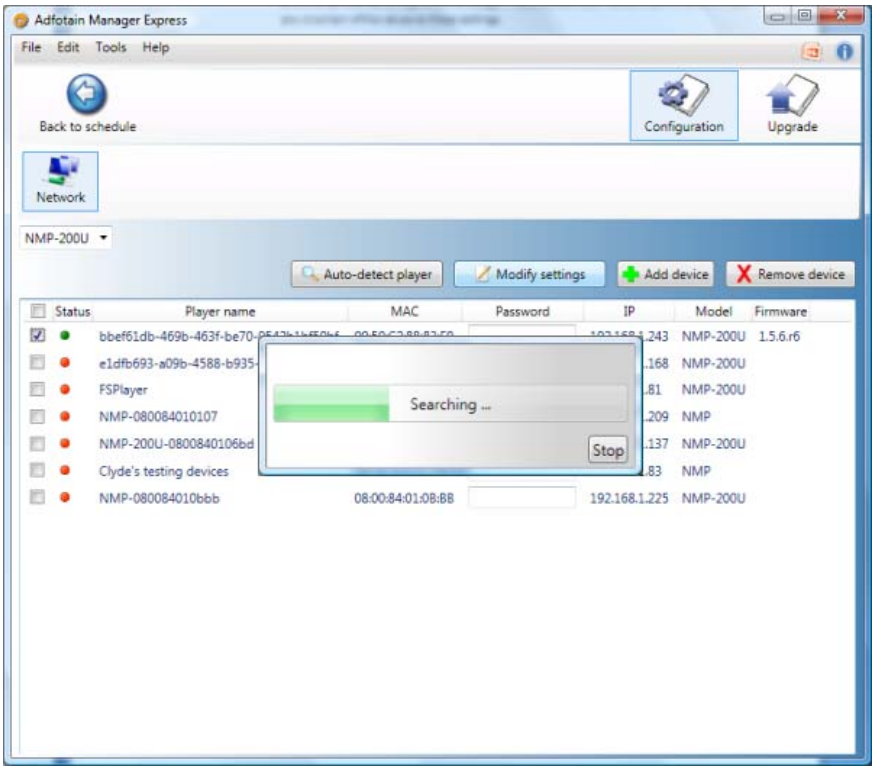
2.3. Configuration with Adfotain Manager Express

Setting the clock

1. Start Adfotain Manager Express and select player model

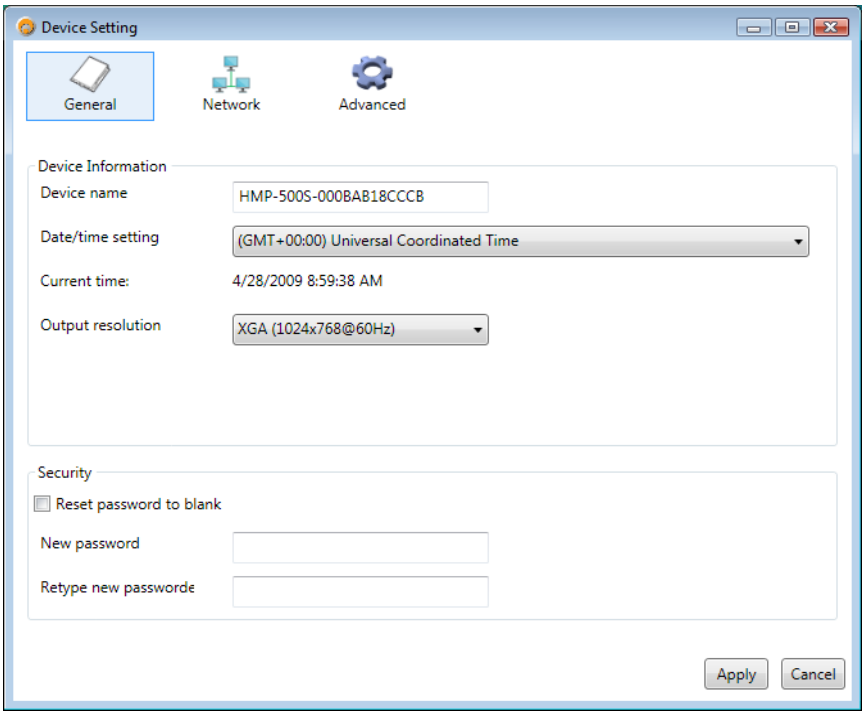


2. After selecting the player, click on the **Configuration** button on the top right.
3. Click **Auto-detect player** button to locate all network-connected devices of the same model. A progress bar is shown, and players are added to a list of operational network devices. You can also stop the search once the target device appears in the list.



Green ● : player is online Red ● : previously detected but currently offline

4. Check the box preceding each target player and click **Modify settings**. You can configure more than one player at once.
5. In the General Settings tab, confirm and select the appropriate **time zone** to ensure correct schedule playback. The time and date is automatically synchronized with your PC when you click Apply. Some options may not be available depending on your player mod



6. Set the device password. The device password protects contents from begin updated by unauthorized sources. You can either remove the password (check “Reset password to blank”) or specify a new password for the player(s).

Setting the network identification

If you are using a DHCP network, please proceed to the next section.

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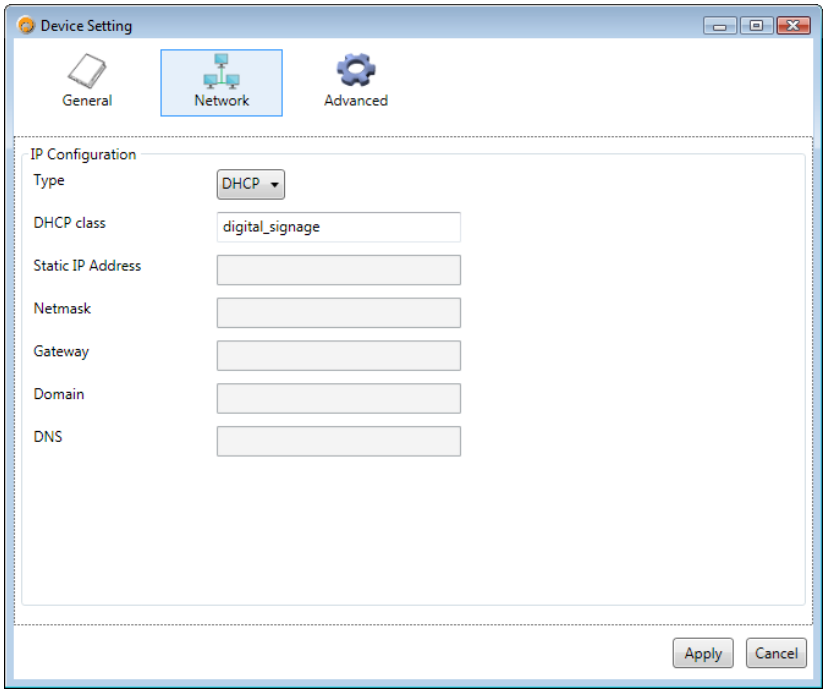
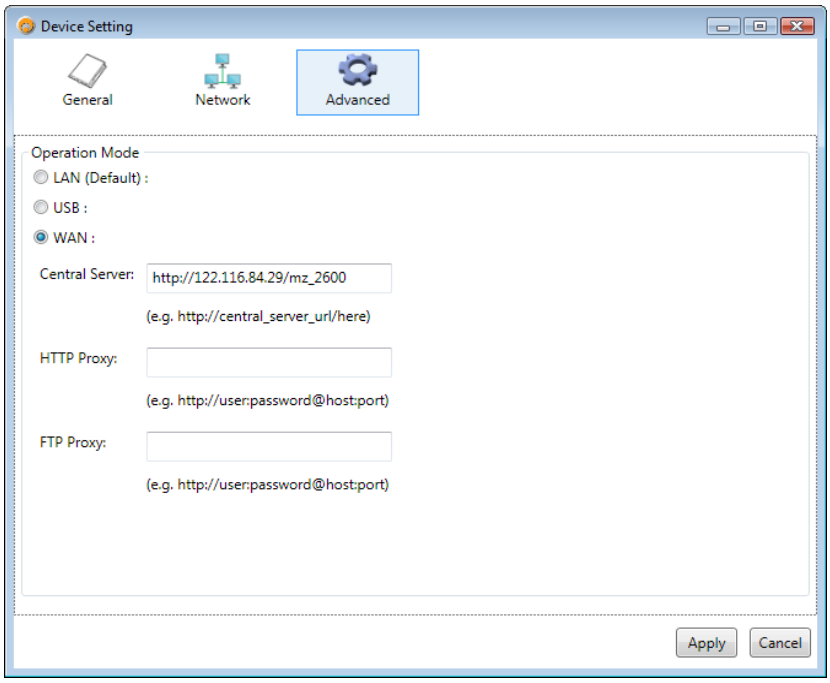
The network settings tab lets you specify the player's static IP address and other settings. It's important that no two devices on the network share the same IP. Net mask, gateway, domain, and DNS can also be configured on this page. Please consult your network administrator if you are uncertain of the values to these settings.



Advanced settings

This page lets you change the management mode of the device.

1. LAN mode (default): This allows local network management via Adfotain Manager Express.
2. USB mode: This mode limits player content updates via USB drive or CF card only.
3. WAN mode: Reserved



Content Management with Adfotain Manager Express

Please see Adfotain Manager Express 2.0 User's Manual for content management operation.

3. Specifications table

	HMP-500S	HMP-505S
Video format support	POPAI Screen Media Standards S6 (MPEG-1 SIF, 3Mbps CBR) S7 (MPEG-1 480p, 10Mbps CBR) S8 (MPEG-1 720p, 15Mbps CBR) S9 (MPEG-2 480p, 6Mbps CBR) S10 (MPEG-2 720p, 12Mbps CBR) E4 (VC-1/WMV9, MP@ML, 720p) E7 (MPEG-4 ASP, 480p, 10Mbps CBR)	
Image format support	POPAI Screen Media Standards S1 (JPEG 480p baseline) S2 (JPEG 720p baseline) E1 (PNG 24bpp+alpha, 480p) E2 (PNG 24bpp+alpha, 720p)	
Audio codec support	POPAI Screen Media Standards S4 (MPEG L2 audio) S5 (MP3 audio, 384Kbps)	
Playback control	Alphabetical looping Adfotain playlist	
Content management method	LAN – Adfotain® Manager Express USB direct update	
Physical I/O connectors	DVI-I VGA (with DVI-to-VGA adapter) S-Video, composite RCA audio L/R Ethernet copper 10/100 BASE-T USB x 2	
Local storage	Internal 80GB 2.5" HDD (Holds up to 36 hrs of typical 5 Mbps HD video)	4GB SLC High Performance CF card (Holds up to 1.8 hrs of typical 5 Mbps HD video)
Accessories	DVI-to-VGA adapter RCA male-3.5mm female audio cable 3.5mm male-male audio cable Ethernet cable Wall-mount bracket VESA mounting kit (Optional)	
Power requirement	12V, 2A DC	
Power consumption	Typical* 7W	Typical* 5W
Environmental	Operating temperature: 0 to 40° C Humidity: 5 – 85% @ 40° C	
Dimensions	211x153x 43 (mm) (excluding projections) 8.3 X 6 X 1.7 (inches) (excluding projections)	

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Weight	1.4kg 3 lbs.	1.14kg 2.5lbs
Safety	UL-approved AC adapters	
Certifications	CE/FCC RoHS	
Warranty	One-year limited parts & labor	

4. Appendix: FAQ

For more frequently asked questions and solutions, search the online product knowledge base at www.IAdea.com/support .

What can I do to improve Adfotain Manager Express performance on my PC?

The latest Microsoft .NET 3.5 SP1 offers improved performance and bug fixes to Adfotain Manager Express. You can install the update via this internet browser link http://go.microsoft.com/fwlink/?LinkId=124150 or by searching for ".NET 3.5 SP1" At www.microsoft.com.

What is maximum file size for a single video file?

The maximum video file size for the HMP-500S/505S Media Player is 2GB. We recommend reserving a safety margin to avoid exceeding the limit (i.e. limiting files to 1850MB).

How to restore device back to factory defaults?

If you forgot the password or modified settings incorrectly, follow these steps to reset player:

1. Connect a USB drive to your PC and format it using FAT or FAT32 file system
2. Inside the USB drive, create a text file at the root level (not inside a folder)
3. Open the file in Text Editor and type in:
   reset_factory_default='yes'
4. Save the file as HMP.conf
5. Plug USB drive created in step 3 to the HMP-500S/505S Media Player to initiate restore

How do I manage playback of my contents?

Playback on a schedule is one of the main functions of your HMP-500S/505S Media Player. It is managed via the easy to use Adfotain Manager Express software.

Unlike the difficulty of programming our VCRs from a remote control, the Adfotain Manager Express software is designed to be simple by leveraging the power of your personal computer. Anyone with basic computer skills can quickly create or modify schedules, delivering the right message to the right audience at the right times. Please refer to the Adfotain Manager Express User's Manual for detailed operations and techniques.

Could the player display Flash or Microsoft PowerPoint presentations?

The player features limited PowerPoint support, but not Flash support.

While PCs can play many formats with varying degrees of success, RISC-based media players are designed to play a limited number of high quality video formats (Please see spec for details). While Microsoft PowerPoint native files could not play directly on a RISC-based player, the file is converted thru other software (i.e. Adfotain Manager Express) into an image format to be played as an image slideshow.

Why won't some media files play smoothly?

The video data bit-rate may be higher than the recommended bit rate.

The video data bit-rate is the amount of video or audio data used per second to store or play the contents, usually expressed in Mbps (mega-bits per second). Video encoded with excessive bit-rates will not playback smoothly in the media player, likely due to storage i/o bottlenecks. You can try recompressing unplayable video files at lower bit rates using the free and open source Handbrake tool at http://handbrake.fr/. Once you have found the right output settings for size and quality, save them in Handbrake **profiles** for future use. Then you can easily recompress any unplayable files you encounter in the future.

Why won't some media files play at all?

Even though the player conforms to leading industry standard video formats, sometimes the videos you acquire may fall outside the compatibility matrix.

If the files can play on your PC but not on your player, you should **recompress** the file to ensure playback. For greatest

compatibility, we recommend outputting high definition content to the WMVHD format (8Mbps bit-rate). You can recompress unplayable video files with recommended file formats and bit rates using the free and open source Handbrake tool at http://handbrake.fr/. Once you have found the right output settings for size and quality, save them in Handbrake **profiles** for future use. Then you can easily recompress any unplayable files you encounter in the future.

The media playback looks different on a PC compared to the media player's screen. (Wrong aspect ratio)

There are 2 major aspect ratios (width-to-height ratios) for video content, but many kinds of displays. If you play 4:3 video on a 16:9 display (or vice versa), a circle becomes oval, and the picture takes on a squeezed or stretched look. To avoid this distorted look, adding black bars are a common technique.

The HMP-500S/505S can be configured to automatically add black bars for certain types of displays. You can set the output resolution in HMP-500's browser configuration page to match the **native resolution** of your display.

Some JPEG images cannot be played in the media player.

Progressive JPEG are not supported. Please convert to baseline JPEG for compatibility.

JPEG images can be either of 2 types: baseline or progressive compression. Baseline JPEG offers greatest compatibility, while progressive JPEGs are suitable for web site images. Progressive images are downloaded and displayed "progressively," being rendered more clearly as more data is received over the internet. Dedicated devices using local storage are usually incompatible with the latter type. Make sure to save images as baseline JPEG in your photo editor, or resave them as baseline JPEGs using free tools such as Paint.net (http://www.paint.net/).

Does my media player support video streaming?

No, all media files are designed to play from local storage (HDD or internal CF card).

During content and schedule sync, contents are transferred to player's local storage before being presented on screen. This ensures the best possible presentation and fluid delivery of your video message. Video streaming raises many playback quality issues such as image freezing, blocking, or blue-screens, costing you valuable "air time" and losing your audience's attention.

Could the media player be controlled by external input devices or interfaces?

No, unless specifically developed for.

Touch panel, bar code scanner, and motion sensors are popular input devices for PC based digital signage media players, but RISC based players require considerable effort to develop special hardware drivers for each I/O device.

The media player is not playing. What should I do?

Check the player's messages on the display (OSD, or on screen display) for status information.

Since RISC-based media player usually lack input devices such as keyboard or mouse like PCs, troubleshooting is usually based on user's knowledge and experience with the specific media player. First check the on screen message and stats reports. Bad play list and timing issues are two major causes of playback problems. To determine if the problem is caused by a bad play list, simply delete the play list and restart player. The player should loop through all media files, indicating a fault with the play list.

If the playback is scheduled to play at specific time, check to see if the device is set to the right time zone on the world clock. When nothing seems wrong, the time zone settings may be the reason the program is not played.

5. Appendix: Alternative Network Configuration Method

If your player has an older firmware, or you are unable to configure device using Adfotain Manager Express, you can configure the player using a web browser. You will also need a crossover cable to connect the player to your PC via Ethernet.

5.1. Using a Web Browser for Network Configuration

The HMP-500S/505S features a software interface, similar to a router configuration interface, to simplify the network setup process. It is compatible with standard Internet browsers such as Internet Explorer or Mozilla Firefox. Connect your player to your PC with a crossover Ethernet network cable, and type the default IP (**169.254.1.1**) in the browser's address bar to log in.

5.2. Logging in to the HMP-500S/505S

The factory default user name is "Admin" and the password field is "digiSignage" with a capital S. (Note: If you have recently upgraded your firmware, the password field may be blank). Click on "Login" to proceed. Once logged in, you can then specify another password if necessary. If you have forgotten a previously set password, see the appendix (FAQ) for factory restore

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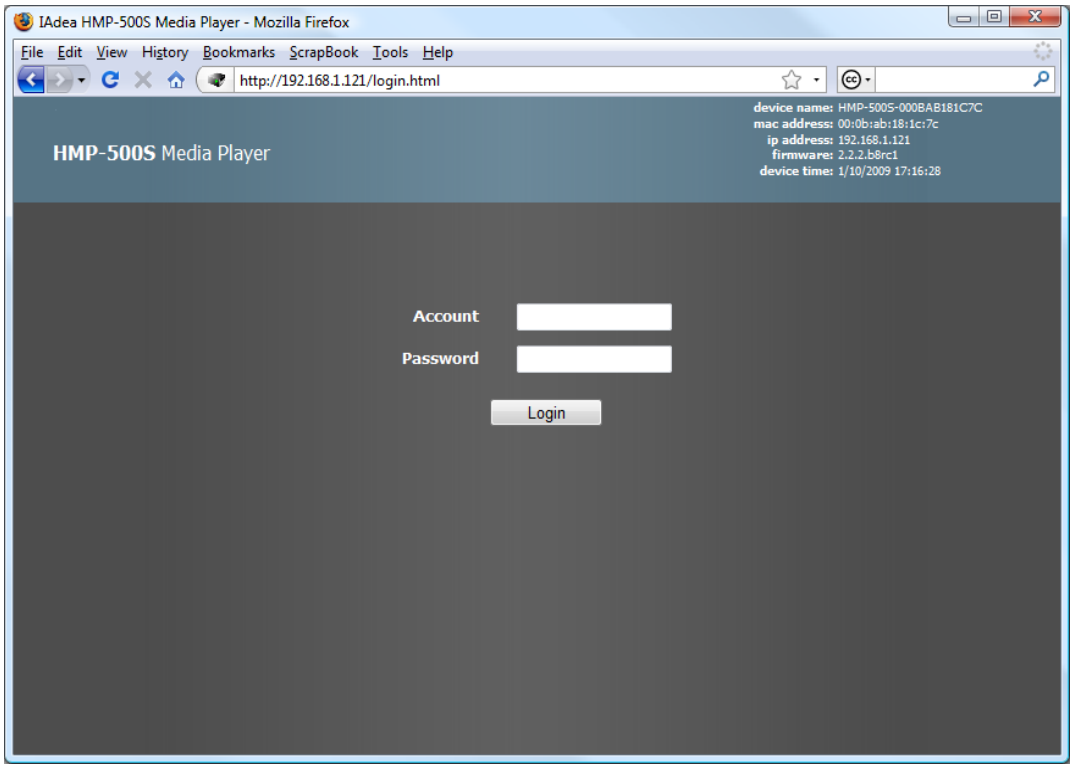
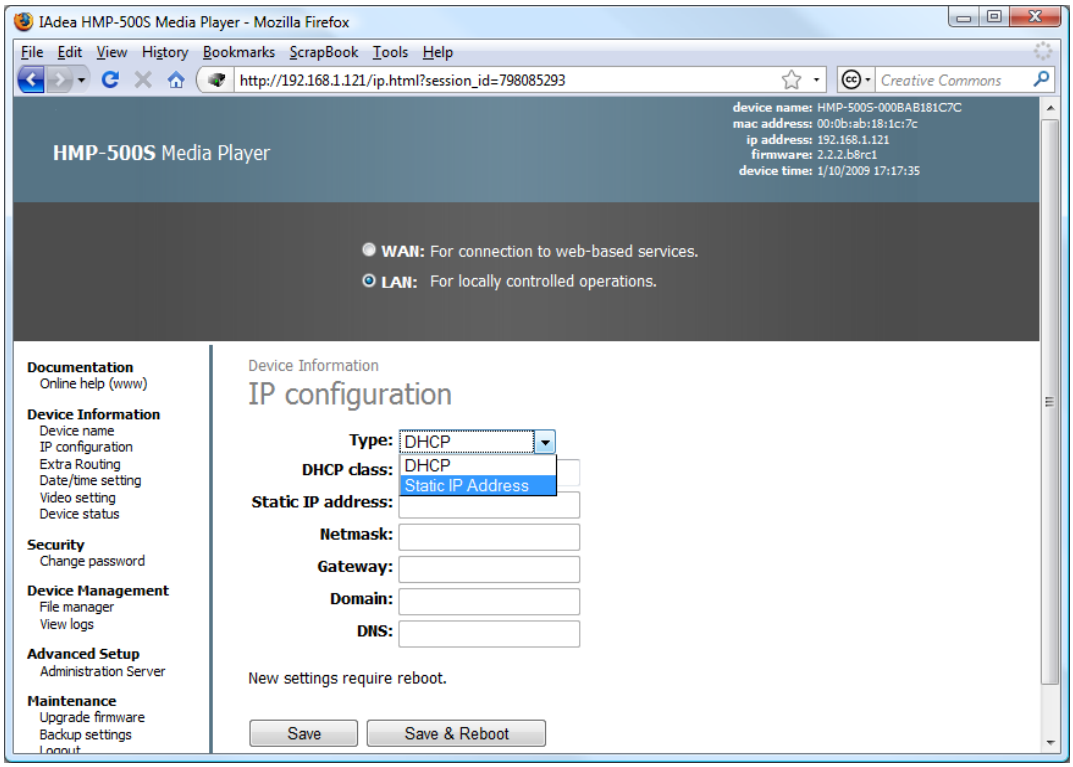
instructions.



Configure an Static IP

Once you have logged in the configuration page, choose IP configuration on the left hand side:



1. Select Static IP Address in drop down menu as shown on image above.
2. Fill in all fields. Contact your network administrator if you do not know the value of the fields.
3. Click Save & Reboot to complete IP configuration.

4. Once the device has rebooted, the new IP can also be confirmed at the boot screen.

Note
You will no longer able to connect to your device using default IP (169.254.1.1) because the device IP has been modified to your pre-assigned static IP.

5.3. Additional device settings table

Additional configuration options in the browser menus are described in this table.

Function Name	Description
Documentation	
Online Help (www)	Link to online support page (Internet access required).
Device Information	
Device Name	Modify the device name.
IP Configuration	Automatically obtain an IP from DHCP server or assign a static IP.
Extra Routing	Advanced network function. Allows device to be configured under complex network environments. Please obtain the configuration data from your network administrator.
Date/time setting	Set your time zone and synchronize time and date of the device. Clock settings run on built-in battery for up to several years, but initially you will need to set it to your time zone for properly scheduled playback.
Video setting	Choose an output resolution that matches your display's *native resolution* for the best results.
Security	
Change password	Change the web browser configuration login password.
Device Management (LAN mode only)	
File manager	Add/delete media files for simple playback. For advanced scheduling features, try the Adfotain Manager Express bundled solution.
View logs	The playback logging feature allows you to check player activity and download data for analysis. Sample Log format: 2008/11/18-13:11:20 play: CD99EC1F.MPG 2008/11/18-13:14:27 play: 3D26CCA8.JPG 2008/11/18-13:14:34 play: C7F240AD.JPG
OSD	Display input text/text file using OSD (on screen display) function.
Maintenance	
Upgrade firmware	Update device to latest firmware version.
Backup settings	Backup/restore all settings.
Logout	Sign out from configuration web page.

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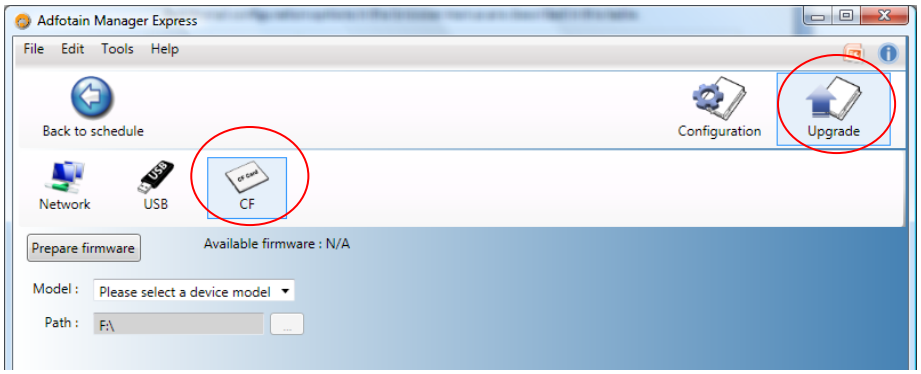
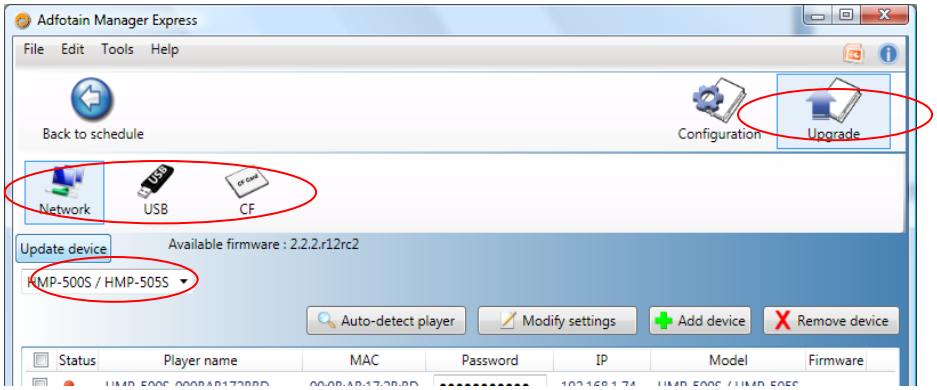
6. Appendix: Firmware Upgrades

If you are using Adfotain Manager Express to manage existing media players, you may be prompted to upgrade the firmware to ensure to enable the latest scheduling features. Current versions of the firmware update files are included on the Adfotain Manager Express CD, while future upgrades may be obtained from your reseller.

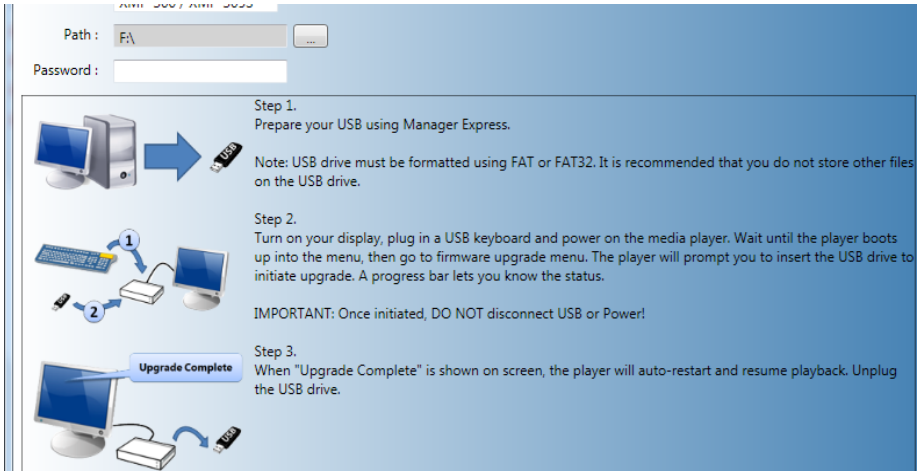
6.1. Firmware upgrade using Adfotain Manager Express



1. Click “Upgrade” to enter the firmware upgrade page
2. Select an upgrade method: Network, USB, or CF card (not all methods are available for all models). You can also manually select the location of a firmware obtained from your reseller.



3. Select your player model. If the model is not shown, then choose another applicable upgrade method to proceed.


Path :
F:\
Password :
Step 1.
Prepare your USB using Manager Express.
Note: USB drive must be formatted using FAT or FAT32. It is recommended that you do not store other files on the USB drive.
Step 2.
Turn on your display, plug in a USB keyboard and power on the media player. Wait until the player boots up into the menu, then go to firmware upgrade menu. The player will prompt you to insert the USB drive to initiate upgrade. A progress bar lets you know the status.
IMPORTANT: Once initiated, DO NOT disconnect USB or Power!
Upgrade Complete
Step 3.
When "Upgrade Complete" is shown on screen, the player will auto-restart and resume playback. Unplug the USB drive.

4. If you selected USB or CF card upgrade, you will need to specify the destination path of the drive or card. If you have set a password for our player, enter it in the **Password** field. Related instructions will be displayed on this page to help you complete the upgrade process.
5. Finally, click on the **Update device** or **Prepare firmware** button to begin transfer of firmware. If the firmware source file cannot be found, you will be asked to locate the firmware manually. The firmware should be available on your Adfotain Manager Express CD or via your reseller.